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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/927,315

08/10/2001

Charles S. Zuker

02307E-120110US

4699

758

7590

04/12/2006

FENWICK & WEST LLP
SILICON VALLEY CENTER
801 CALIFORNIA STREET
MOUNTAIN VIEW, CA 94041

EXAMINER

BRANNOCK, MICHAEL T

ART UNIT

PAPER NUMBER

1649

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Status of Application: Claims and Amendments

Applicant is notified that the finality of the previous Office Action (Paper 9/15/2005) is withdrawn due to the issuance of a new rejection under 35 USC 102(e), see below.

It is noted that a Notice of Appeal has been filed. Applicant can request a refund for the associated fees or leave it as credit for future appeals.

Applicant is notified that the amendments put forth on 12/15/05 have been entered in full.

Applicant is reminded that the instant claims are being examined only to the extent that they read on the elected invention, i.e., only to the extent that they read on a hT1R2/hT1R3 receptor of SEQ ID NO: 9 and 15, Applicant's traversal of the restriction requirement having been acknowledged and addressed in paper 8/26/03.

Response to Amendment

Applicant is notified that any outstanding objection or rejection that is not expressly maintained in this Office action has been withdrawn in view of Applicant's persuasive arguments and in view of newly issued U.S. Patent No: 6955887 which provides additional evidence that the art recognizes that the instant polypeptides are amenable to sequence variation at the level of 90%, see below.

New Rejections:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 49-51, 56-58, 67, 69, 70-72, 75, 76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, for the following reason.

Claims 49, 75, require have been amended to require that “said functional effect is binding to or an effect on receptor activity”. This phrase renders the claim indefinite because it does not set forth what part of the sentence “binding to” refers to. Furthermore, it is unclear which receptor is the receptor referred to in the claim, e.g. is it “the receptor” as set forth in line (ii)? or another receptor. It is suggested to applicant that the phrase “said functional effect is binding to the receptor or an effect on the activity of the receptor” would bring the claims into compliance with 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

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subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 49, 50, 51, 56, 58, 67, 69-72, 75 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No: 6955887, published October 18, 2005, to ADLER.

Adler disclose assay methods (claims 45-114 of ADLER) for modulators of a sweet taste receptor comprising a heterodimer of hT1R2 and hT1R3. The hT1R2 disclosed by ADLER is 98.9% identical to the instant SEQ ID NO: 9 (see attached alignment), whereas the hT1R3 disclosed by ADLER is 100% identical to the instant SEQ ID NO: 15. The methods claimed by ADLER include contacting a compound with a cell expressing the hT1R2/hT1R3 heterodimer and determining the effect that the compound has on the activity of the hT1R2/hT1R3 heterodimer (claims 75 and 76) or measuring ligand binding (claim 45). Wherein the cell is human (claim 81), and the effect is chemical or phenotypic, e.g. claims 95 and 103. Furthermore, as claimed by ADLER, for example, in claim 81, the use of cells such as CHO, HeLa and HEK-293 in the methods would necessarily involve the recombinant expression of the hT1R2/hT1R3 heterodimer, as required by the instant claims. Although, claims 45-114 of ADLER are not worded exactly the same as the instant claims, they perform the same method steps, with the same materials and accomplish the same goals and are thus not patentably distinct.

Additionally, the instant claims 50 and 51 make the distinction between non-covalent and covalently linked heterodimers. The instant specification does not indicate what the default state of the heterodimers would be when expressed in a cell, only that they could be either non-covalently or covalently linked, see page 11. Thus it is assumed that it is an inherent property of

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the expressed heterodimers that they would be either non-covalently or covalently linked, i.e. a mixture of both states, and thus the claims of the 6955887 patent read on both claim 50 and 51.

Applicant is reminded that the ADLER reference is a U.S. patent or U.S. patent application publication of a pending or patented application that claims the rejected invention. An affidavit or declaration is inappropriate under 37 CFR 1.131(a) when the reference is claiming the same patentable invention, see MPEP § 2306. If the reference and this application are not commonly owned, the reference can only be overcome by establishing priority of invention through interference proceedings. See MPEP Chapter 2300 for information on initiating interference proceedings. If the reference and this application are commonly owned, the reference may be disqualified as prior art by an affidavit or declaration under 37 CFR 1.130. See MPEP § 718.

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US-09-897-427A-4
; Sequence 4, Application US/09897427A
; GENERAL INFORMATION:
; APPLICANT: ADLER, JON ELLIOT
; APPLICANT: LI, XIADONG
; APPLICANT: STAZEWSKI, LENA
; APPLICANT: XU, HONG
; APPLICANT: EHEVERRI, FERNANDO
; TITLE OF INVENTION: T1R HETERO-OLIGOMERIC TASTE RECEPTORS
; FILE REFERENCE: 078003-0282558
; CURRENT APPLICATION NUMBER: US/09/897,427A

; CURRENT FILING DATE: 2001-07-03
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 839
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-897-427A-4

Query Match 98.9%; Score 4392.5; DB 23; Length 839;
Best Local Similarity 99.3%; Pred. No. 0;
Matches 833; Conservative 0; Mismatches 5; Indels 1; Gaps 1;

QY 1 MGPRAKTICSLFLLWVLAEPANSDFYLP GDYLLGGLFSLHANMKGIVHLNPLQVPMCK 60
Db 1 MGPRAKTICSLFLLWVLAEPANSDFYLP GDYLLGGLFSLHANMKGIVHLNPLQVPMCK 60
QY 61 EYEVKVIQYNLMQAMRFVBEINNDSSLLPGVLLGYEIVDVCYISNNVQPVLYFLAHEDN 120
Db 61 EYEVKVIQYNLMQAMRFVBEINNDSSLLPGVLLGYEIVDVCYISNNVQPVLYFLAHEDN 120
QY 121 LLPIQEDYSNYISRVAVIGPDNSESVMTVANFLSLFLLPQITYSAISDELDRDKVRFPAL 180
Db 121 LLPIQEDYSNYISRVAVIGPDNSESVMTVANFLSLFLLPQITYSAISDELDRDKVRFPAL 180
QY 181 LRTTPSADHHVEAMVOLMLHFRWNWIIIVLVSSDTYGRDNGQLLGERVARRDICI AFOETL 240
Db 181 LRTTPSADHHVEAMVOLMLHFRWNWIIIVLVSSDTYGRDNGQLLGERVARRDICI AFOETL 240
QY 241 PTLQPNQNMTEERQRLVTIVDKLQQSTARVVVFPD LTLYHFPNEVLRQNFTGAVWIA 300
Db 241 PTLQPNQNMTEERQRLVTIVDKLQQSTARVVVFPD LTLYHFPNEVLRQNFTGAVWIA 300
QY 301 SESWAIDPVLHNLTELGHGTFLGITIQSVPIPGFSEFREWGPQAGPPPLSRTSQSYTCN 360
Db 301 SESWAIDPVLHNLTELGHGTFLGITIQSVPIPGFSEFREWGPQAGPPPLSRTSQSYTCN 360
QY 361 QECDNCLNATLSFNTILRLSGERVVYSVYSAVYVAHAHLSLLGCDKSTCTKR VVYPWQL 420
Db 361 QECDNCLNATLSFNTILRLSGERVVYSVYSAVYVAHAHLSLLGCDKSTCTKR VVYPWQL 420
QY 421 LEEIWKNFTLLDHQIFFDPQGDVALHLEIVQWQWDRSQNPFSVASYYP LQRQLKNIQD 480
Db 421 LEEIWKNFTLLDHQIFFDPQGDVALHLEIVQWQWDRSQNPFSVASYYP LQRQLKNIQD 480
QY 481 ISWHTVNTIIPMSCKRQSGQKKKPVGIHVCCFECIDCLPGTFLNHTED EYECQACP 540
Db 481 ISWHTVNTIIPMSCKRQSGQKKKPVGIHVCCFECIDCLPGTFLNHTED EYECQACP 540
QY 541 NEWSYQSETSCFKRQLVFLEWHEAPTIAVALLAALGFLSTLAILVIFWRH FQTPIVRSAG 600
Db 541 NEWSYQSETSCFKRQLVFLEWHEAPTIAVALLAALGFLSTLAILVIFWRH FQTPIVRSAG 600
QY 601 GPMCFMLMLTLLLVAYMVVPVYVGPVKVSTCLCRQALFPLCFTICISCI AVRSFQIVCAFK 660
Db 601 GPMCFMLMLTLLLVAYMVVPVYVGPVKVSTCLCRQALFPLCFTICISCI AVRSFQIVCAFK 660
QY 661 MASRFPRAYSYVWRYQGPYVSMAPITVLKMVIIVIGMLARQS-HPRTD PDDPKITIVSC 719
Db 661 MASRFPRAYSYVWRYQGPYVSMAPITVLKMVIIVIGMLATGLSPTRT DDDPKITIVSC 720
QY 720 NPNYRNSLLFNTSLDLLSVVGFSFAYMGKELPTNYNEAKPITLSMTFYFT SSVSLCTFM 779
Db 721 NPNYRNSLLFNTSLDLLSVVGFSFAYMGKELPTNYNEAKPITLSMTFYFT SSVSLCTFM 780
QY 780 SAYSGVLVTIVDLLVTVLNLLAISLGYFGPKCYMILFYPERNTPAYFNSMI QGYTMRRD 838
Db 781 SAYSGVLVTIVDLLVTVLNLLAISLGYFGPKCYMILFYPERNTPAYFNSMI QGYTMRRD 839

RESULT 6
US-10-035-045-21
; Sequence 21, Application US/10035045

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brannock, Ph.D., whose telephone number is (571) 272-0869. The examiner can normally be reached on Mondays through Fridays from 10:00 a.m. to 4:00 p.m.

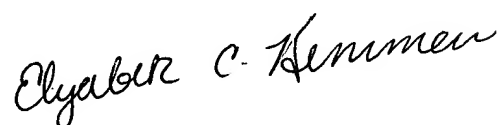
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, Ph.D., can be reached at (571) 272-0867. Official papers filed by fax should be directed to **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

MB



March 24, 2006



**ELIZABETH KEMMERER
PRIMARY EXAMINER**